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Stable Ischemic Heart Disease

DRUG INTERACTION BETWEEN CLOPIDOGREL AND RANITIDINE OR OMEPRAZOLE IN PATIENTS WITH CORONARY HEART DISEASE: A DOUBLE-BLIND, DOUBLE-DUMMY, RANDOMIZED COMPARATIVE STUDY

Moderated Poster Contributions

Hall C

Monday, March 31, 2014, 10:15 a.m.-10:30 a.m.

Session Title: Stable Ischemic Heart Disease: Drug Therapy

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Authors: Remo Holanda de Mendonca Furtado, Beatriz Tonon Freire, Celia Strunz, Carlos JDG Barbosa, André Franci, Flavia BB Arantes, Cyrillo C. Filho, Fernando R. Menezes, Elbio A. D'Amico, Jose Nicolau, Heart Institute (Incor) - University of Sao Paulo Medical School, Sao Paulo, Brazil, Clinics Hospital - University of Sao Paulo Medical School, Sao Paulo, Brazil

Background: In patients taking dual antiplatelet therapy with acetylsalicylic acid (ASA) and clopidogrel, proton-pump inhibitors are often utilized for gastrointestinal (GI) bleeding prophylaxis. However, this class of medication has been associated with reduction of the antiplatelet potency of clopidogrel. The main purpose of this study was to compare the antiplatelet effect of clopidogrel taken with ranitidine or omeprazole.

Methods: We analyzed 85 patients with chronic coronary artery disease (CAD) treated with ASA 100 mg QOD chronically. All patients had their platelet aggregability measured after one week of clopidogrel 75 mg daily. VerifyNow P2Y12TM was utilized, with aggregability depicted as P2Y12 Reactivity Units (PRU). In the sequence, the subjects were randomized to receive, in a double-blind, double-dummy fashion, omeprazole 20 mg BID or ranitidine 150 mg BID. After one more week of treatment, the aggregability test was repeated.

Results: The median age of the population was 63 y (67 % males). Forty-one patients were randomized to omeprazole and 44 to ranitidine, being the groups well matched. The mean platelet aggregability before GI prophylaxis in the global population was $157,87 \pm 76,75$ PRU. The results after one week of treatment in both groups are depicted in the table.

Conclusion: In patients with stable CAD treated with ASA, ranitidine did not influence the clopidogrel antiplatelet activity, contrary to omeprazole utilization that reduced the antiplatelet drug activity.

Results: Mean \pm SD platelet aggregability		
	Ranitidine (n = 44)	Omeprazole (n = 41)
Baseline PRU (with only ASA + clopidogrel)	153,61 \pm 70,12	159,73 \pm 83,06
PRU after one week of study drug treatment	158,77 \pm 76,37	173,54 \pm 72,29
P-value	0,44	0,043